

REMARKS

In the Office Action, the Examiner rejected Claims 1-3, 7, 10-11, 13, 22, and 25; objected Claims 5-6, 8-9, 12, 14-20, 24, and 26; and allowed claims 27-35.

Applicant respectfully thanks the Examiner with appreciation for allowing Claims 27-35, and for indicating that Claims 5-6, 8-9, 12, 14-20, 24, and 26 contain patentable subject matter.

In response to the Office Action, Applicant amends Claims 1, 12, 13, 15, 20, 22, and 27 to clarify Applicant's claimed invention. Applicant amends these claims solely to facilitate prosecution and reserves the right to pursue claims of broader scope in a continuation application.

After entry of the present Response, Claims 1-35 are pending in the Application. Applicant respectfully asserts that Claims 1-35 are in condition for allowance and respectfully requests reconsideration of the claims in light of the above presented clarifying amendments and following remarks. No new matter is believed to be introduced by the above presented clarifying amendments.

I. Telephonic Interview

Applicant respectfully thanks the Examiner for the courtesy of a telephonic interview with Applicant's representative on 6 September 2005. The Examiner and the undersigned discussed the status of the claims and that the undersigned would be presenting claim amendments in light of the 12 August 2005 Office Action. The Examiner and the undersigned reached no agreements with respect to the claims during the telephonic interview.

If for any reason the Examiner does not consider the foregoing record of the telephonic interview complete and accurate, the Examiner is respectfully requested to contact the undersigned Attorney.

II. Pending Claims

Applicant amends independent Claims 1, 13, and 22 to clarify Applicant's claimed invention. Specifically, Claim 1 now recites "wherein a first TIM metal is at least partially diffused within a second TIM metal"; Claim 13 now recites "wherein the bonding temperature is less than the melting temperature of the metals"; and Claim 22 now recites "wherein the bonding material has a melting temperature that is lower than the melting point of the metals."

Independent claims 1, 13, and 22 now recite subject matter deemed allowable by the Examiner. More specifically, Claim 1 now recites subject matter deemed allowable in allowed Claim 35; and Claims 13 and 22 now recite subject matter deemed allowable in allowed Claim 27. Thus, Applicant believes that independent Claims 1, 13, and 22, and their respective dependent claims, are in condition for allowance.

Additionally, Applicant amends allowed independent Claim 27 merely to recite a "process" in accordance with dependent Claims 28-32. And Applicant amends Claim 32 to depend from independent Claim 27.

Applicant also amends dependent Claims 12, 15, and 20 to correct typographical errors or in light of amendments to their respective independent claims.

Applicant respectfully asserts that Claims 1-35 are now in condition for allowance and that their dependent claims are also in condition for allowance for the further limitations contained therein.

III. 35 U.S.C. § 103(a) Rejection

The Examiner rejected Claims 1, 3, 7, 10, 11, 13, 22, and 25 under 35 U.S.C. § 103(a) as being unpatentable over *Vrtis et al.* (U.S. Patent No. 6,751,099) in view of *Wang et al.* (U.S. Patent No. 6,909,176). In response, Applicant has amended independent Claims 1, 13, and 22 to include subject matter that was previously allowed. Namely, these claims now recite subject matter which the Examiner deemed allowable in the 12 August 2005 Office Action. (See Page 4, 12 August 2005 Office Action).

Accordingly, Applicant believes that Claims 1, 3, 7, 10, 11, 13, 22, and 25 are now allowable. Withdrawal of the § 103(a) rejection to Claims 1, 3, 7, 10, 11, 13, 22, and 25 is respectfully requested.

IV. FEES

Applicant files this Response within three (3) months of the 12 August 2005 Office Action and with no additional claims. Accordingly, Applicant believes that no extension or claims fees are due. The Commissioner is authorized, however, to charge any fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

V. CONCLUSION

The foregoing is a complete response to the Office Action mailed 12 August 2005. Applicant respectfully asserts that Claims 1-35 are in condition for allowance and respectfully requests passing of this case in due course of patent office business. If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities remaining in the application which may be corrected by an Examiner's amendment, a telephone call to Hunter Yancey at (404) 885-3696 is respectfully requested.

Respectfully submitted,

TROUTMAN SANDERS LLP

By: 
James Hunter "Hunter" Yancey, Jr.
USPTO Registration No. 53,809
Attorney for INTEL CORPORATION

Troutman Sanders LLP
Bank of America Plaza
600 Peachtree Street, NE
Suite 5200
Atlanta, Georgia 30308-2216
United States of America
P: (404) 885-3696
F: (404) 962-6828
E: hunter.yancey@troutmansanders.com

DATE: 26 October 2005